In the Claims:

Please amend claims 1, 3, 7, 11 and 12, and cancel claims 2, 9 and 10 without prejudice or disclaimer, as indicated in the following listing of claims, which replaces all prior versions.

1. (Currently Amended) A method of manufacturing a trench gate semiconductor device comprising the steps of: providing a silicon device body having a first major surface, the silicon device body having a drain region of a first conductivity type and a body region over the drain region; forming a trench extending downwards into the silicon device body from the first major surface, the trench having sidewalls and a base; lining the sidewalls of the trench with dielectric liner; etching the silicon at the base of the trench to form porous silicon at the base of the trench, the dielectric liner formed on the sidewalls of trench preventing the sidewalls from also becoming porous; and thermally oxidizing the device to oxidize the porous silicon at the bottom of the trench to form a plug at the base of the trench; and depositing conductive material within the trench to form a gate.

2. (Cancelled).

3. (Currently Amended) A method ~~according to claim 1~~ of manufacturing a trench gate semiconductor device comprising the steps of:

providing a silicon device body having a first major surface, the silicon device body having a drain region of a first conductivity type and a body region over the drain region;

forming a trench extending downwards into the silicon device body from the first major surface, the trench having sidewalls and a base;

etching the silicon at the base of the trench to form porous silicon at the base of the trench; and thermally oxidizing the device to oxidize the porous silicon at the bottom of the trench to form a plug at the base of the trench ~~wherein the step of oxidizing the device forms~~ and to form sidewall oxide on the sidewalls of the trench;[,]

~~the method further comprising the steps of~~ etching away the oxide formed on the ~~side wall oxide~~ sidewalls and [[of]] forming [[the]] a gate oxide by thermal oxidation on the ~~side wall~~ sidewalls; and

after the step of forming the gate oxide, ~~before the step of~~ depositing conductive material within the trench to form a gate.

4. (Previously Presented) A method according to claim 1 wherein the step of forming the trench includes providing a mask on the first major surface defining an opening and etching the trench extending downwards from the first major surface through the opening.

5. (Original) A method according to claim 4 wherein the mask is an oxide hard mask.

6. (Original) A method according to claim 4 wherein the step of etching the silicon at the bottom of the trench to form porous silicon includes dry-etching the bottom of the trench through the same mask used to define the trench.

7. (Currently Amended) A method ~~according to claim 1 further comprising~~ of manufacturing a trench gate semiconductor device comprising the steps of:

providing a silicon device body having a first major surface, the silicon device body having a drain region of a first conductivity type and a body region over the drain region;

forming a trench extending downwards into the silicon device body from the first major surface, the trench having sidewalls and a base;

depositing a silicon plug in the trench ~~wherein the step of etching the silicon at the bottom of the trench includes etching the silicon plug~~;

etching the silicon at the base of the trench including the silicon plug to form porous silicon at the base of the trench;

thermally oxidizing the device to oxidize the porous silicon at the bottom of the trench; and

depositing conductive material within the trench to form a gate.

8. (Previously Presented) A method according to claim 1 further comprising forming a source implant of first conductivity type at the first major surface adjacent to the trench and forming source, gate and drain electrodes attached to the source implant, the gate and the drain region at the bottom of the trench respectively to complete the trench gate semiconductor device.

9. (Cancelled).

10. (Cancelled).

11. (Currently Amended) A method of manufacturing a trench gate semiconductor device, the method comprising:

providing a silicon device body having a first major surface, the silicon device body having a drain region of a first conductivity type and a body region over the drain region;

forming a trench extending downwards into the silicon device body from the first major surface, the trench having sidewalls and a base;

lining the sidewalls of the trench with a dielectric liner;

etching the silicon at the base of the trench to form porous silicon at the base of the trench, the dielectric liner formed on the sidewalls of trench preventing the sidewalls from also becoming porous;

thermally oxidizing the device to oxidize the porous silicon at the base of the trench to form a plug at the base of the trench, wherein thermally oxidizing the device forms sidewall oxide on the sidewalls of the trench; and

depositing conductive material within the trench to form a gate.

12. (Currently Amended) ~~The method of claim 11,~~ A method of manufacturing a trench gate semiconductor device, the method comprising:

providing a silicon device body having a first major surface, the silicon device body having a drain region of a first conductivity type and a body region over the drain region;

forming a trench extending downwards into the silicon device body from the first major surface, the trench having sidewalls and a base;

etching the silicon at the base of the trench to form porous silicon at the base of the trench;

thermally oxidizing the device to oxidize the porous silicon at the base of the trench to form a plug at the base of the trench, wherein thermally oxidizing the device forms sidewall oxide on the sidewalls of the trench;

~~further comprising~~ etching away the sidewall oxide and forming a gate oxide by thermal oxidation on the sidewalls of the trench ~~before~~; and

after etching away the sidewall oxide, depositing conductive material within the trench to form a gate.

13. (Previously Presented) The method of claim 11, wherein forming the trench includes providing a mask having an opening and on the first major surface and etching through the opening.

14. (Previously Presented) The method of claim 13, wherein the mask is an oxide hard mask.

15. (Previously Presented) The method of claim 13, wherein etching the silicon at the base of the trench to form porous silicon includes dry-etching the base of the trench through the same mask used to define the trench.

16. (Previously Presented) The method of claim 13, further comprising forming a source implant of the first conductivity type at the first major surface adjacent to the trench and forming source, gate and drain electrodes attached to the source implant, the gate and the drain region at the bottom of the trench respectively.